

Amendment to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (previously presented): A system for treating a vascular condition, comprising:
a catheter;
a stent coupled to the catheter, the stent including a stent framework;
a hydrophobic polymeric coating disposed on the stent framework, wherein the polymeric coating comprises a blended matrix of a polysulfone and a styrenic block copolymer, wherein the blended matrix includes a first fraction comprising the polysulfone and a second fraction comprising the styrenic block copolymer, wherein the first fraction is greater than the second fraction and wherein the styrenic block copolymer has a molecular weight between 200 Daltons and 200,000 Daltons; and
a therapeutic agent in contact with the blended matrix.

Claim 2 (original): The system of claim 1 wherein the catheter includes a balloon used to expand the stent.

Claim 3 (original): The system of claim 1 wherein the catheter includes a sheath that retracts to allow expansion of the stent.

Claim 4 (previously presented): The system of claim 1 wherein the stent framework comprises one of a metallic base or a polymeric base.

Claim 5 (original): The system of claim 4 wherein the metallic base is selected from the group consisting of stainless steel, nitinol, tantalum, MP35N alloy, platinum, titanium, a suitable biocompatible alloy, a suitable biocompatible material, and a combination thereof.

Claim 6 (original): The system of claim 1 wherein the therapeutic agent is dispersed within the blended matrix of the polysulfone and the styrenic block copolymer.

Claim 7 (original): The system of claim 1 wherein the polysulfone has a molecular weight between 10,000 Daltons and 100,000 Daltons.

Claim 8 (cancelled)

Claim 9 (original): The system of claim 1 wherein the polymeric coating comprises between 0.0 percent and 50 percent of the therapeutic agent by weight.

Claim 10 (original): The system of claim 1 wherein the polymeric coating has a thickness between 0.5 microns and 20 microns.

Claim 11 (original): The system of claim 1 wherein the polymeric coating has a weight between 50 micrograms and 1500 micrograms.

Claim 12 (original): The system of claim 1 wherein the therapeutic agent is positioned between the polymeric coating and the stent framework.

Claim 13 (previously presented): The system of claim 12 wherein the therapeutic agent positioned between the polymeric coating and the stent framework has a thickness between 0.1 microns and 20 microns.

Claim 14 (original): The system of claim 1 wherein the blended matrix of the polysulfone and the styrenic block copolymer provides a controlled elution rate for the therapeutic agent.

Claim 15 (original): The system of claim 1 wherein the therapeutic agent is selected from the group consisting of an antirestenotic drug, an antisense agent, an antineoplastic agent, an antiproliferative agent, an antithrombogenic agent, an anticoagulant, an antiplatelet agent, an antibiotic, an anti-inflammatory agent, a steroid, a gene therapy agent, a therapeutic substance, an organic drug, a pharmaceutical compound, a recombinant DNA product, a recombinant RNA product, a collagen, a collagenic derivative, a protein, a protein analog, a saccharide, a saccharide derivative, a bioactive agent, a pharmaceutical drug, and a combination thereof.

Claim 16 (original): The system of claim 1 wherein the polymeric coating comprises a plurality of therapeutic agents, each therapeutic agent having a predetermined elution rate, the blended matrix of the polysulfone and the styrenic block copolymer eluting the therapeutic agents at the predetermined elution rates.

Claim 17 (original): The system of claim 16 wherein a first therapeutic agent is concentrated adjacent to the stent framework, and a second therapeutic agent is concentrated adjacent to the outer surface of the polymeric coating.

Claim 18 (original): The system of claim 17 wherein the first therapeutic agent comprises an antirestenotic drug and the second therapeutic agent comprises an anti-inflammatory drug.

Claim 19 (original): The system of claim 1 further comprising:
a primer coating disposed on the stent framework between the stent framework and the polymeric coating.

Claim 20 (original): The system of claim 19 wherein the primer coating is selected from the group consisting of parylene, polyurethane, phenoxy, epoxy, polyimide, polysulfone, pellathane, and a suitable polymeric primer material.

Claim 21 to Claim 28 (cancelled)

Claim 29 (previously presented): A drug-polymer coated stent, comprising:
a stent framework; and
a polymeric coating disposed on the stent framework, wherein the polymeric coating comprises a blended matrix of a polysulfone and a styrenic block copolymer; and
a therapeutic agent contacting the polymeric coating, wherein the blended matrix comprises a first fraction of the polysulfone and a second fraction of the styrenic block copolymer based on a predetermined elution rate of the therapeutic agent, wherein the ratio of first fraction of polysulfone to second fraction of styrenic block copolymer is selected so the coating has a predetermined hydrophobicity.

Claim 30 (original): The stent of claim 29 wherein the stent framework comprises one of a metallic base or a polymeric base.

Claim 31 (original): The stent of claim 29 wherein the blended matrix comprises a chain length of the polysulfone and a chain length of the styrenic block copolymer based on a predetermined elution rate of the therapeutic agent.

Claim 32 (cancelled).

Claim 33 (original): The stent of claim 29 wherein the therapeutic agent is selected from the group consisting of an antirestenotic agent, an antisense agent, an antineoplastic agent, an antiproliferative agent, an antithrombogenic agent, an anticoagulant, an antiplatelet agent, an antibiotic, an anti-inflammatory agent, a steroid, a gene therapy agent, a therapeutic substance, an organic drug, a pharmaceutical compound, a recombinant DNA product, a recombinant RNA product, a collagen, a collagenic derivative, a protein, a protein analog, a saccharide, and a saccharide derivative.

Claim 34 (original): The stent of claim 29 wherein the therapeutic agent is dispersed within the blended matrix of the polysulfone and the styrenic block copolymer.

Claim 35 (original): The stent of claim 29 wherein the therapeutic agent is positioned between the polymeric coating and the stent framework.

Claim 36 (original): The stent of claim 29 further comprising:
a primer coating disposed on the stent framework between the stent framework and the polymeric coating.

Claim 37 (original): The stent of claim 29 wherein the primer coating is selected from the group consisting of parylene, polyurethane, phenoxy, epoxy, polyimide, polysulfone, pellathane, and a suitable polymeric primer material.

Claim 38 to Claim 40 (cancelled)

Claim 41 (withdrawn): A system for treating a vascular condition, comprising:

a catheter;

a stent coupled to the catheter, the stent including a stent framework;

a hydrophilic polymeric coating disposed on the stent framework, wherein the polymeric coating comprises a blended matrix of a polysulfone and a styrenic block copolymer, wherein the blended matrix includes a first fraction comprising the styrenic block copolymer and a second fraction comprising the polysulfone, wherein the first fraction is greater than the second fraction and wherein the styrenic block copolymer has a molecular weight between 200 Daltons and 200,000 Daltons; and

a therapeutic agent in contact with the blended matrix.

Claim 42 (withdrawn): The system of claim 41 wherein the stent framework comprises one of a metallic base or a polymeric base.

Claim 43 (withdrawn): The system of claim 42 wherein the metallic base is selected from the group consisting of stainless steel, nitinol, tantalum, MP35N alloy, platinum, titanium, a suitable biocompatible alloy, a suitable biocompatible material, and a combination thereof.

Claim 44 (withdrawn): The system of claim 41 wherein the therapeutic agent is dispersed within the blended matrix of the polysulfone and the styrenic block copolymer.

Claim 45 (withdrawn): The system of claim 41 wherein the polysulfone has a molecular weight between 10,000 Daltons and 100,000 Daltons.

Claim 46 (withdrawn): The system of claim 41 wherein the polymeric coating comprises between 0.0 percent and 50 percent of the therapeutic agent by weight.

Claim 47 (withdrawn): The system of claim 41 wherein the polymeric coating has a thickness between 0.5 microns and 20 microns.

Claim 48 (withdrawn): The system of claim 41 wherein the polymeric coating has a weight between 50 micrograms and 1500 micrograms.

Claim 49 (withdrawn): The system of claim 41 wherein the therapeutic agent is positioned between the polymeric coating and the stent framework.

Claim 50 (withdrawn): The system of claim 41 wherein the therapeutic agent is selected from the group consisting of an antirestenotic drug, an antisense agent, an antineoplastic agent, an antiproliferative agent, an antithrombogenic agent, an anticoagulant, an antiplatelet agent, an antibiotic, an anti-inflammatory agent, a steroid, a gene therapy agent, a therapeutic substance, an organic drug, a pharmaceutical compound, a recombinant DNA product, a recombinant RNA product, a collagen, a collagenic derivative, a protein, a protein analog, a saccharide, a saccharide derivative, a bioactive agent, a pharmaceutical drug, and a combination thereof.

Claim 51 (withdrawn): The system of claim 41 wherein the polymeric coating comprises a plurality of therapeutic agents, each therapeutic agent having a predetermined elution rate, the blended matrix of the polysulfone and the styrenic block copolymer eluting the therapeutic agents at the predetermined elution rates.

Claim 52 (withdrawn): The system of claim 51 wherein a first therapeutic agent is concentrated adjacent to the stent framework, and a second therapeutic agent is concentrated adjacent to the outer surface of the polymeric coating.

Claim 53 (withdrawn): The system of claim 52 wherein the first therapeutic agent comprises an antirestenotic drug and the second therapeutic agent comprises an anti-inflammatory drug.